

**CLAIMS**

What is claimed is:

- 5 1. A method for generating a pixel-oriented graph,  
comprising the steps of:  
determining a visual boundary for representing  
an aggregate of a set of information depicted in the  
pixel-oriented graph;  
10 constructing a set of pixel blocks that  
represent the information such that the pixel blocks  
are visually distinguished by the visual boundary.
2. The method of claim 1, wherein the step of  
15 determining a visual boundary includes the step of  
obtaining a selection of the aggregate from a user.
3. The method of claim 1, wherein the step of  
determining a visual boundary comprises the step of  
20 determining a location for a line in the pixel-  
oriented graph in response to the aggregate.
4. The method of claim 1, wherein the step of  
determining a visual boundary comprises the step of  
25 determining a location for an area in the pixel-  
oriented graph in response to the aggregate.
5. The method of claim 4, wherein the step of  
determining a location for an area comprises the step  
30 of determining a location for a rectangle.
6. The method of claim 4, wherein the step of  
determining a location for an area comprises the step

of determining a location for a circle.

7. The method of claim 1, wherein the step of  
determining a visual boundary comprises the step of  
5 determining a location for a curve in the pixel-  
oriented graph in response to the aggregate.

8. The method of claim 1, wherein the step of  
constructing a set of pixel blocks comprises the step  
10 of determining a set of pixel blocks to be positioned  
above the visual boundary and a set of pixel blocks  
to be positioned below the visual boundary.

9. The method of claim 1, further comprising the  
15 step of filling in one or more gaps in the pixel  
blocks by replicating one or more pixels in the pixel  
blocks.

10. The method of claim 1, wherein the step of  
20 determining a visual boundary comprises the step of  
obtaining a user selection of the visual boundary.

11. The method of claim 1, further comprising the  
step of coloring the visual boundary.  
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12. The method of claim 1, further comprising the  
step of applying a weight to the visual boundary that  
indicates a relative importance of the aggregate.

30 13. A data analysis system, comprising:  
data store for holding a set of information;  
display for providing a pixel-oriented graph  
that represents the information;

graph generator that obtains the information from the data store and that determines a visual boundary for representing an aggregate of the information and that constructs a set of pixel blocks  
5 that represent the information such that the pixel blocks are visually distinguished by the visual boundary.

14. The data analysis system of claim 13, wherein  
10 the graph generator obtains a selection of the aggregate from a user.

15. The data analysis system of claim 13, wherein the graph generator constructs the pixel blocks by  
15 determining a set of pixel blocks to be positioned above the visual boundary and a set of pixel blocks to be positioned below the visual boundary.

16. The data analysis system of claim 13, wherein  
20 the graph generator fills in one or more gaps in the pixel blocks by replicating one or more pixels in the pixel blocks.

17. The data analysis system of claim 13, wherein  
25 the graph generator obtains a selection of the visual boundary from a user.

18. The data analysis system of claim 13, wherein the graph generator colors the visual boundary.

30 19. The data analysis system of claim 13, wherein the graph generator applies a weight to the visual boundary that indicates a relative importance of the

aggregate.

20. A computer-readable storage medium that contains  
a computer program that when executed generates a  
5 pixel-oriented graph by determining a visual boundary  
for representing an aggregate of a set of information  
depicted in the pixel-oriented graph and constructing  
a set of pixel blocks that represent the information  
such that the pixel blocks are visually distinguished  
10 by the visual boundary.

21. The computer-readable storage medium of claim  
20, wherein determining a visual boundary includes  
obtaining a selection of the aggregate from a user.  
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22. The computer-readable storage medium of claim  
20, wherein constructing a set of pixel blocks  
comprises determining a set of pixel blocks to be  
positioned above the visual boundary and a set of  
20 pixel blocks to be positioned below the visual  
boundary.

23. The computer-readable storage medium of claim  
20, further comprising filling in one or more gaps in  
25 the pixel blocks by replicating one or more pixels in  
the pixel blocks.

24. The computer-readable storage medium of claim  
20, further comprising coloring the visual boundary.  
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25. The computer-readable storage medium of claim  
20, further comprising applying a weight to the  
visual boundary that indicates a relative importance

of the aggregate.